

ASSOCIATION DES BANQUES CENTRALES AFRICAINES



ASSOCIATION OF AFRICAN CENTRAL BANKS

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**REPORT OF THE EXPERTS GROUP ON THE REFINEMENT OF THE CONVERGENCE  
CRITERIA OF THE AFRICAN MONETARY COOPERATION PROGRAMME (AMCP)**  
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## I. INTRODUCTION

1. Under Article 2 of the Statutes of the Association of African Central Banks (AACB), one of the purposes of the AACB is to follow a well-timed and sequenced convergence process culminating in the adoption of a single currency and a common central bank in Africa, i.e. a monetary union. A number of economists consider that despite the fact that countries forming a monetary union resign from monetary policies of their own as instruments of macroeconomic stabilization, the monetary union can be a source of significant benefits for its members. The benefits are inter alia related to elimination of the costs associated with currency exchange, elimination of exchange rate related risks in economic relationships between countries in the union, as well as the promotion of price and employment stabilization and growth of real output. It has also been argued that to establish a monetary union, based on a single currency and a common central bank, the member States are required to attain convergence in their macro-economic performances.
2. The idea of the convergence criteria (nominal convergence) adopted in many economic and monetary unions is to some extent, a result emanating from the theory of optimum currency areas developed by Mundell in 1961<sup>1</sup>. In essence, economic convergence is an important factor enforcing macroeconomic stabilization in the countries aspiring to form a monetary union.
3. To assess economic convergence on the continent, the Assembly of Governors of the Association of African Central Banks developed and adopted the African Monetary Cooperation Programme (AMCP) during its meeting in Algiers, Algeria, in September 2002. The programme is based on a framework for macroeconomic convergence, highlighting the convergence criteria (see table in appendix) and the timelines for the attainment of the convergence criteria.
4. A review of the reports submitted by AACB sub-regional groupings for the AMCP progress report shows that Member States have generally failed to attain convergence criteria. Furthermore, the reports indicate that in some instances the convergence criteria and standards sometimes vary among sub-regions even though the AMCP lays out a framework of reference for them.
5. At its 38<sup>th</sup> Ordinary Meeting held in Malabo, Equatorial Guinea, on 14 August 2015, the Assembly of Governors took note of the progress report on the implementation of the African Monetary Cooperation Program (AMCP) in 2014 and noted the difficulties of member countries in general to fulfill the AMCP's primary criteria which in part was due to the negative impact of the international situation and the escalation of capital expenditures to address infrastructure gaps in many regions. Moreover, despite the decision by the Assembly of Governors during its meeting in Balaclava, Mauritius, to extend the stage III of the AMCP which ended in 2014 by two years, most countries continued to miss the AMCP targets for stage III. Thus, Governors requested the establishment of an Expert Group drawn from central banks of the AACB Bureau for the purpose of refining the macroeconomic convergence criteria in terms of definition, measurement and harmonization at the sub-regional and continental levels.
6. During its meeting held in Dakar, on 3<sup>rd</sup> March 2016, the AACB Bureau requested the Experts Group to present a report to the Assembly of Governors in August 2016. In this regard, the Bureau tasked the AACB Secretariat to submit to the Chairman a proposal for convening of a meeting of the Experts Group. After reviewing the proposal, the Chairman convened the meeting in Douala, Cameroun, on 31 May - 1<sup>st</sup> June 2016. A second meeting was convened by Central Bank of Nigeria in Abuja on 12-13 August 2016 to adopt the report of the Experts

<sup>1</sup> Robert Mundell (1961), « A Theory of Optimum Currency Areas », American Economic Review, Vol. 51, 1961.

Group.

7. After the presentation of the report, the Assembly of Governors commended, at its session of 19<sup>th</sup> August 2016 in Abuja, the Experts Group for the report developed. However, Governors considered that the report went beyond the tasks assigned by including a review of the stages for the establishment of the African Central Bank (ACB). The Governors requested that the parts of the report relevant to the establishment of the ACB be removed and the amended report be sent to AACB member central banks for comments by 31 December 2016, through the central banks chairing the sub-regions.
8. The report of the Experts Group including the comments of central banks was examined by the Bureau of the AACB during its meeting held on 8<sup>th</sup> March 2017 in Dakar. In this regard, the Bureau instructed the Experts Group to:
- Include justifications for the selected criteria and thresholds identified;
  - Present time-lines for the creation of the African Central Bank (ACB), provided for in the Strategy of the AUC-AACB Joint Committee for the establishment of this institution;
  - Submit the report to the member central banks and to the Regional Economic Communities (RECs) for comments;
  - Present the report to the 40th session of the Assembly of Governors scheduled for August 2017 in South Africa.
9. To enable the Experts Group to fulfill the requested tasks, the AACB Chairman convened a meeting of the Group on 29<sup>th</sup>-30<sup>th</sup> June 2017 at the Central Bank of Nigeria in Abuja, Nigeria.

## II. WORK SESSIONS

10. The Experts Group carried out its work as per the following stages:
- Stocktaking and comments on the convergence criteria and standards used in the AACB sub-regions;
  - Stocktaking and comments on the convergence criteria and standards used in the regional economic communities;
  - Stocktaking and comments on the horizons for the establishment of sub-regional and regional economic communities' common currencies;
  - Took note of the implications of the conclusions of the joint AUC-AACB strategy on the establishment of the African Central Bank (ACB);
  - Selection, definition and measurement of the convergence criteria for the AMCP.
11. 21. **Stocktaking and comments on the convergence criteria and standards used in the AACB sub-regions**

### 2.1.1. Key observations on the primary criteria

All the AACB sub-regions use the same primary criteria which are consistent with the African

Monetary Cooperation Programme (AMCP). However, differences are observed in the following areas:

**12. 2.1.1.1. Budget deficit**

- East Africa: Overall budget deficit (excluding grants) / GDP < 3%;
- Southern Africa: Overall budget deficit (excluding grants) / GDP < 3%;
- West Africa: Budget deficit (including grants and commitment basis) GDP  $\leq$  3%;
- Central Africa: Overall budget deficit (excluding grants) / GDP < 3%;
- North Africa: Overall budget deficit (excluding grants) / GDP < 3%.

**13.** Besides the West Africa sub-region, all the other sub-regions have the same definition and threshold for the criterion relevant to budget deficit.

**14. 2.1.1.2. Inflation**

There is a need to agree on the definition as the different sub-regions generally use average inflation or do not specify which inflation rate is used.

- East Africa: Annual average headline inflation rate of < 5%;
- Southern Africa: Inflation rate of between 3 to 7 %;
- West Africa: Average inflation rate of < 10% with a long term goal of < 5% by 2019;
- Central Africa: Inflation rate of < 3%;
- North Africa: Average headline inflation rate of < 5%.

**15.** Both the North Africa and the East Africa sub-regions measure this criterion on the basis of average headline CPI (urban). In other regions, no information is provided as to whether the indicator is headline inflation, core inflation or GDP deflator. Furthermore, there are differences in the thresholds (3%, 5% and 10%).

**16. 2.1.1.3. Central Bank credit to Government**

- East Africa: Elimination;
- Southern Africa: Minimization;
- West Africa: not more than 10% of previous year's tax revenue;
- Central Africa: Elimination;
- North Africa: Zero (but laws exist allowing to go up to 10% of the average of previous three fiscal years tax revenue).

**17.** There are differences in the thresholds relevant to the criterion on Central Bank credit to the Government, ranging from elimination, minimization to 10% of previous fiscal year (or three years') tax revenue.

**18. 2.1.1.4. External Reserves / Imports**

- East Africa: External Reserves / Imports of goods and services  $\geq$  6 months;
- Southern Africa: External reserves / Imports of goods and services > 6 months;
- West Africa: Gross external reserves / imports cover >3 months;
- Central Africa: Gross external reserves / Imports of goods and services > 6 months;
- North Africa: Gross external reserves / Imports of goods and services > 6 months.

**19.** Besides West Africa, all the sub-regions use a threshold of 6 months for this criterion. Furthermore, West Africa, Central Africa and North Africa indicate "Gross external reserves", while "External reserves" are mentioned for East Africa and Southern Africa. There will be a need to:

- Specify whether it relates to net or gross external reserves;
- Define the computation method, namely whether based on past 12 months of imports or forward 12 months of imports;
- Specify whether encumbered reserves are included.

**Table1**  
**Use of the Primary Convergence Criteria in the Sub-Regions**

	<b>East Africa</b>	<b>Southern Africa</b>	<b>West Africa</b>	<b>Central Africa</b>	<b>North Africa</b>
<b>Overall budget deficit / GDP</b>	< 3%	< 3%	$\leq$ 3%	< 3%	< 3%
<b>Inflation rate</b>	< 5%	between 3-7 percent	< 10%	< 3%	< 5%
<b>Central bank credit to Government</b>	0.0	Min.	< 10% TR (-1)	0.0	0.0
<b>External reserves / Imports</b>	$\geq$ 6 m.	> 6 m.	> 3 m.	> 6 m.	> 6 m.

**2.1.2. Key observations on the secondary criteria**

**20.** Whereas for the primary criteria sub-regions have virtually the same indicators, the same does not apply to the secondary criteria.

**2.1.2.1. Domestic fiscal receipts / GDP**

- 21.**
- East Africa: Domestic fiscal receipts (Tax revenue) / GDP  $\geq$  20%;
  - Southern Africa: Tax revenue / GDP  $\geq$  20%;
  - West Africa: Does not have this criterion;
  - Central Africa: Tax revenue / GDP  $\geq$  20%;

- North Africa: Domestic fiscal receipts / GDP  $\geq$  20%.

22. West Africa does not take account of this criterion. Moreover, there is a need to define the content of tax revenue and domestic fiscal receipts to harmonize these two concepts. The same threshold is used in all the sub-regions.

#### 2.1.2.2. Salary mass / Total domestic fiscal receipts

- 23.
- East Africa: Salary mass / Total domestic fiscal receipts  $<$  35%;
  - Southern Africa: Salary mass / Total tax revenues  $\leq$  35%;
  - West Africa: Does not have this criterion;
  - Central Africa: Salary mass / Total fiscal receipts  $<$  35%;
  - North Africa: Salary mass / Total domestic fiscal receipts  $<$  35%.

24. West Africa does not have this criterion. There should be a harmonization between total tax revenues and total domestic fiscal receipts. Furthermore, salary mass should be replaced by Government wage bill.

#### 2.1.2.3. Government capital investment / Fiscal receipts

- 25.
- East Africa: Government capital investment / Fiscal receipts  $\geq$  20%;
  - Southern Africa: Contribution to public investment funds / fiscal receipts  $\geq$  20%;
  - West Africa: Does not have this criterion;
  - Central Africa: Financing of public investment / tax revenues  $\geq$  20%;
  - North Africa: Government capital investment / Fiscal receipts  $\geq$  20%.

The criterion is not used in West Africa.

#### 2.1.2.4. Real exchange rate

- 26.
- East Africa: Maintenance of real effective exchange rate stability;
  - Southern Africa: Maintenance of real exchange rate stability;
  - West Africa: Nominal exchange rate stability (+/- 10%);
  - Central Africa: Maintenance of real exchange rate stability;
  - North Africa: Exchange rate stability.

27. There are differences in the measurements used. In East Africa the measure is the percentage change in annual average real effective exchange rate (REER) in the two preceding years. Other sub-regions use current real effective exchange rate, real exchange rate or the nominal exchange rate.

### 2.1.2.5. Real interest rate

- 28.
- East Africa: Maintenance of positive real interest rates (91-day T-bill rates);
  - Southern Africa: Maintenance of positive real interest rates;
  - West Africa: Does not use this criterion;
  - Central Africa: Maintenance of positive real interest rates;
  - North Africa: Maintenance of positive real interest rates.
29. Beside the West Africa sub-region, which does not use this criterion, all the other sub-regions mention maintenance of positive real interest rates. East Africa sub-region specifies the use of 91-day T-bill rates. North Africa sub-region makes the calculation of real interest rates on the basis of the interest rate announced on deposits of one year or less. The other sub-regions do not provide details on the interest rates used.
30. **2.1.2.6. Non accumulation of arrears**
- East Africa: Does not use this criterion;
  - Southern Africa: Does not use this criterion;
  - West Africa: Does not use this criterion;
  - Central Africa: Non accumulation of new domestic and external arrears;
  - North Africa: Non accumulation of new domestic and external payment arrears and liquidation of all old ones.
31. There will be a need to harmonize the use of this criterion which is taken into account only in Central Africa and North Africa.
32. **2.1.2.7. Public debt / GDP**
- East Africa: Does not use this criterion;
  - Southern Africa: Does not use this criterion;
  - West Africa: Public debt / GDP  $\leq$  70%;
  - Central Africa: Public debt / GDP  $\leq$  70%;
  - North Africa: Does not use this criterion.
33. The criterion is used in two sub-regions (West Africa and Central Africa) out of the five.
34. Overall, the use of the secondary criteria can be summarized in the following table.

**Table 2: Use of the secondary criteria in the sub-regions**

	<b>East Africa</b>	<b>Southern Africa</b>	<b>West Africa</b>	<b>Central Africa</b>	<b>North Africa</b>
<b>Domestic fiscal receipts / GDP</b>	≥ 20%	≥ 20%	No	≥ 20%	≥ 20%
<b>Salary mass / Total tax revenue</b>	< 35%	≤ 35%	No	< 35%	< 35%
<b>Gov. capital inv. / Fiscal receipts</b>	≥ 20%	≥ 20%	No	≥ 20%	≥ 20%
<b>Real / Nominal exchange rate</b>	Stability	Stability	Stability	Stability	Stability
<b>Real interest rate</b>	Positive	Positive	No	Positive	Positive
<b>Non accumulation of arrears</b>	No	No	No	Yes	Yes
<b>Public debt / GDP</b>	No	No	≤ 70%	≤ 70%	No

### 35. 22 **Stocktaking and comments on the convergence criteria and standards used in the Regional Economic Communities**

The convergence criteria were reviewed for the following Regional Economic Communities:

- East African Community (EAC);
- Economic Community of Central African States (ECCAS);
- Economic Community of West African States (ECOWAS);
- Common Market for Eastern and Southern Africa (COMESA);
- Southern African Development Community (SADC);
- Arab Maghreb Union (AMU).

#### **2.2.1. Key observations on the primary criteria**

##### **2.2.1.1. Budget deficit**

36.

- EAC: Fiscal deficit (including grants) / GDP ≤ 3%;
- ECCAS: Fiscal deficit (excluding grants) / GDP < 3%;
- ECOWAS: Budget deficit (including grants, on commitment basis) / GDP ≤ 3%;
- COMESA: Budget deficit (excluding grants) / GDP ≤ 3%;
- SADC: Budget deficit (excluding grants) / GDP ≤ 3% (±1 PP);
- AMU: Budget deficit (excluding grants) / GDP ≤ 3%.

37.

Two RECs include grants when determining budget deficit, while the other four exclude grants. All RECs use the threshold of 3%.

### 2.2.1.2. Inflation

- 38.
- EAC: Headline inflation  $\leq 8\%$ ;
  - ECCAS: Annual inflation rate  $\leq 3\%$ ;
  - ECOWAS: Average inflation rate  $< 10\%$  with a long term goal of 5% by 2019;
  - COMESA: Inflation rate  $\leq 3\%$ ;
  - SADC: Inflation rate  $\leq 5\%$ , (3% from 2018);
  - AMU: Annual inflation rate between 1.5% and 2%.
39. There are differences in the thresholds used. ECCAS and COMESA use the threshold of 3%, while EAC, ECOWAS, SADC and AMU use other levels.

### 2.2.1.3. Central Bank credit to Government

- 40.
- EAC: The EAMU protocol provides a date of 2021 to have elimination of overdraft facility to government and while this is not part of the Macroeconomic Convergence Criteria, it is a requirement for transition to the EAC Monetary Union;
  - ECCAS: Minimizing the budget deficit financing by the Central Bank;
  - ECOWAS: Budget deficit financing by the Central Bank  $\leq 10\%$  of previous year's tax revenue;
  - COMESA: Elimination;
  - SADC: Central Bank budget deficit financing  $\leq 5\%$  of previous year's tax revenue;
  - AMU: Elimination.
41. ECOWAS and SADC use a percentage of the previous year's tax revenue to determine the Central Bank deficit financing. ECCAS considers minimizing the budget deficit financing by the Central Bank while EAC, COMESA and AMU envisage its elimination.

### 2.2.1.4. External Reserves / Imports

- 42.
- EAC: External reserves / Imports of goods and services  $\geq 4.5$  months;
  - ECCAS: External reserves / Imports of goods and services  $\geq 3$  months;
  - ECOWAS: Gross external reserves / Imports of goods and services  $\geq 3$  months;
  - COMESA: Gross external reserves / Imports of goods and services  $\geq 6$  months;
  - SADC: Gross external reserves / Imports of goods and services  $\geq 6$  months;
  - AMU: External reserves / Imports of goods and services  $\geq 6$  months.
43. This criterion is used with thresholds ranging from 3 to 6 months. There is a need to indicate whether it is net or gross external reserves for EAC and ECCAS.

### 2.2.1.5. Public debt / GDP

- 44.
- EAC: Ceiling on gross public debt of 50% of GDP in Net Present Value terms;
  - ECCAS: not used;
  - ECOWAS: not used;
  - COMESA: not used;
  - SADC: Public debt / Nominal GDP  $\leq$  60;
  - AMU: not used.
45. This criterion is used by SADC and EAC as the primary criterion which should be less than or equal to 60% and 50% respectively.

**Table 3: Use of the primary criteria in the RECs**

	<b>EAC</b>	<b>ECCAS</b>	<b>ECOWAS</b>	<b>COMESA</b>	<b>SADC</b>	<b>AMU</b>
<b>Budget deficit / GDP</b>	$\leq$ 3%	< 3%	$\leq$ 3%	$\leq$ 3%	$\leq$ 3%	$\leq$ 3%
<b>Inflation</b>	$\leq$ 8%	$\leq$ 3%	< 10%	$\leq$ 3%	$\leq$ 5%	1.5-2%
<b>Central bank credit to Government</b>	Elimination By 2021	Minim.	$\leq$ 10% Tax Revenues (-1)	Elimination	$\leq$ 5% Tax Revenues (-1)	Elimination
<b>External reserves / Imports</b>	$\geq$ 4.5 m.	$\geq$ 3 m.	$\geq$ 3 m.	$\geq$ 6 m.	$\geq$ 6 m.	$\geq$ 6 m.
<b>Public debt / GDP</b>	$\leq$ 50%	No	No	No	$\leq$ 60%	No

### 2.2.2. Key observations on the secondary criteria

46. **2.2.2.1. Tax revenues / GDP**
- EAC: Tax revenues / GDP  $\geq$  25%;
  - ECCAS: Tax revenues / GDP  $\geq$  20%;
  - ECOWAS: not used;
  - COMESA: Tax revenues / GDP  $\geq$  20%;
  - SADC: not used;
  - AMU: not used.
47. EAC has a threshold of 25%, ECCAS and COMESA have a threshold of 20%, while ECOWAS, SADC and AMU do not use this criterion.

### 2.2.2.2. Government wage bill / tax revenues

- 48.
- EAC: Not used;
  - ECCAS: Government wage bill / Tax revenues < 35%;
  - ECOWAS: not used;
  - COMESA: not used;
  - SADC: not used;
  - AMU: not used.
49. ECCAS uses this criterion with a threshold of 35%, while EAC, ECOWAS, SADC, COMESA and AMU do not use it.
50. **2.2.2.3. Government capital investment / Fiscal receipts**
- EAC: not used;
  - ECCAS: Government capital investments / Tax revenues > 20%;
  - ECOWAS: not used;
  - COMESA: Government capital investments / Tax revenues > 20%;
  - SADC: Government capital investments / Tax revenues > 30%;
  - AMU: not used.
51. ECCAS, COMESA and SADC use this criterion with a threshold of 20% or 30%. EAC, ECOWAS and AMU do not use it.
- 2.2.2.4. Real exchange rate**
- 52.
- EAC: not used;
  - ECCAS: Maintenance of real exchange rate stability;
  - ECOWAS: Nominal exchange rate stability (+/- 10%);
  - COMESA: Maintenance of real exchange rate stability;
  - SADC: not used;
  - AMU: not used.
53. ECCAS and COMESA seek the maintenance of real exchange rate stability, while ECOWAS has an objective of nominal exchange rate stability. EAC, SADC and AMU do not use this criterion.
- 2.2.2.5. Real interest rate**
- 54.
- EAC: not used;
  - ECCAS: Maintenance of positive real interest rates;
  - ECOWAS: not used;
  - COMESA: Maintenance of positive real interest rates;

- SADC: not used;
- AMU: not used.

55. The maintenance of positive real interest rates is an objective for ECCAS and COMESA, while EAC, ECOWAS, SADC and AMU do not use this criterion.

#### 2.2.2.6. Non accumulation of arrears

- 56.
- EAC: not used;
  - ECCAS: Non accumulation of new domestic and external arrears and payment of past arrears;
  - ECOWAS: not used;
  - COMESA: not used;
  - SADC: not used;
  - AMU: not used.

57. ECCAS is the only REC referring to this criterion.

#### 2.2.2.7. Public debt / GDP

58. ECOWAS uses the indicator public debt / GDP as a secondary criterion that should be less or equal to 70%. COMESA indicates that the ratio should be reduced to a sustainable level. This ratio is used as a primary criterion by EAC and SADC, and is expected to be less than or equal to 50% and 60% respectively.

#### 2.2.2.8. Other Secondary criteria

59. SADC uses the following indicators as secondary criteria:

- rate of national saving ( $\geq 30\%$ , and  $\geq 35\%$  from 2018);
- deficit of current account / GDP ( $< 9\%$ , and  $< 3\%$  from 2018);
- economic growth rate  $\geq 7\%$ .

The EAC also uses the following indicators as secondary criteria:

- Ceiling on Core Inflation of 5%; and,
- Ceiling on fiscal deficit, excluding grants of 6% of GDP.

COMESA uses the current account deficit which needs to be reduced to a sustainable level, and economic growth that should be at a sustainable level.

60. The use of the secondary criteria in the Regional Economic Communities can be summarized in the following table.

**Table 4: Use of the secondary criteria in the RECs**

	EAC	ECCAS	ECOWAS	COMESA	SADC	AMU
Tax revenues / GDP	≥ 25%	≥ 20%	No	≥ 20%	No	No
Gov. wage bill / Tax revenues	No	< 35%	No	No	No	No
Gov. capital inv. / Tax revenues	No	≥ 20%	No	> 20%	> 30%	No
Real / Nominal exchange rate	No	Stability	Stability	Stability	No	No
Real interest rate	No	Positive	No	Positive	No	No
Non accumulation of arrears	No	Yes	No	No	No	
Public debt / GDP	No	No	< 70%	Reduction to Sustainable level	No	No
Rate of national saving	No	No	No	No	≥ 30%	No
Deficit of current account / GDP	No	No	No	Reduction to Sustainable level	< 9%	No
Economic growth	No	No	No	Sustainable level	≥ 7%	No
Core inflation	≤ 5%	No	No	No	No	No
Fiscal deficit excluding grants/ GDP	≤ 6%	No	No	No	No	No

### 61. 23 Stocktaking and comments on the horizons for the establishment of common currencies

In 2002, the AACB set a horizon for the establishment of a common currency in Africa. Regional Economic Communities have also planned for single regional currencies through the years. The different timelines for a single currency in the AACB sub-regions and the RECs are indicated in the following table.

**Table 5: horizons for the establishment of common currencies**

AACB sub-regions and RECs	Timeline
AACB sub-regions	2021
EAC	2024
ECCAS	2025
ECOWAS	2020

COMESA	2024
SADC	2024
AMU	2021

62. The African Monetary Cooperation Programme envisaged the harmonization of monetary cooperation programmes of the various sub-regional groupings as building blocks with the ultimate goal of achieving a single monetary zone by the year 2021, with a common currency and a single Central Bank at the continental level. The RECs have set time horizons ranging from 2020 to 2025.

63. **24. Conclusion of the Joint AUC-AACB strategy on the establishment of the African Central Bank**

Taking into account the fact that African countries are at different stages of development, the Joint AUC-AACB strategy on the establishment of the African Central Bank (ACB) recommends a five-stage continental roadmap spanning the period 2014 – 2034. The strategy recognizes that the main difficulties in establishing common currencies will be encountered at the REC level. Once regional currencies have been established, and member states have committed to monetary integration, the subsequent integration of a smaller number of sub-regional currencies to achieve a continental currency should become more straightforward. RECs are encouraged to establish regional currencies by 2028, and the African Single Currency should be established by 2034 for participating countries and the RECs.

64. **25. Selection, definition and measurement of the convergence criteria for the AMCP**

The above review indicates that there are differences in the number of criteria and thresholds used in the AACB sub-regions and Regional Economic Communities, as well as in the definitions and measurements of the identified criteria. Therefore, the need for harmonization in the identification and implementation of the convergence criteria.

65. **2.5.1. Harmonization of the primary criteria**

The following table summarizes the proposals for the primary criteria to be selected, as well as their thresholds, definitions and measurements in the AACB sub-regions and the Regional Economic Communities.

**Table 6: Selected Primary Criteria**

Criteria	Threshold	Definition	Measurement	Justifications
<b>Inflation</b>	Inflation $\leq 7\%$ (target $\leq 3\%$ by 2038)	Change in Consumer Price Index during the year (12 months year-on-year)	Average Annual Inflation Rate (Headline Inflation)	<ul style="list-style-type: none"> <li>- Historical inflation on the continent averages 11%</li> <li>- Threshold studies indicate level of about 12%</li> <li>- High budget deficit</li> <li>- High debt/GDP ratio</li> <li>- Need to stimulate growth in the forecast horizon</li> </ul>
<b>Overall Budget Deficit /GDP</b>	$\leq 5\%$ (target $\leq 3\%$ by 2033)	The difference between General Govt. revenue (+grants) and expenditure on commitment basis as a percentage of nominal GDP <sup>2</sup> - Measured using the fiscal year	- Difference between revenue (+grants) and expenditure of less than 5% of GDP	Using the European Monetary Union Framework where $d=g*b$ $d$ =budget deficit / GDP $g$ = projected nominal GDP growth rate $b$ =government debt / GDP In Africa ; $g=8\%$ , $b=65\%$
<b>Central Bank Credit to Government</b>	$\leq 5\%$ (target 0% by 2038)	Central Bank advances to government including purchase of government debt instruments in the current year	$\leq 5\%$ of the previous year's government's tax revenue	<ul style="list-style-type: none"> <li>- Given the current state of Government finances</li> <li>- Governments are encouraged to move towards financing from the market</li> <li>- Progressively towards elimination</li> </ul>
<b>External Reserves/Imports of Goods and Services</b>	$\geq 3$ months (target $\geq 6$ months by 2038)	The ratio of stock of gross external reserves to current imports of goods and services	Number of months of imports based on moving average of the last six months	<ul style="list-style-type: none"> <li>- To address macroeconomic shocks</li> <li>- To create confidence in the economy</li> <li>- Smooth functioning of the foreign exchange market</li> </ul>

<sup>2</sup> / The European Central Bank (ECB) refers to Government revenue as General Government revenue. Moreover, the ECB use a threshold of  $< 60\%$  for the ratio of government debt to GDP at market prices where 'government' means general government, that is central government, regional or local government and social security funds, to the exclusion of commercial operations, as defined in the European System of Integrated Economic Accounts.

## 66. Justification of the primary convergence criteria

The convergence criteria aim at reinforcing the homogeneity and stability of the main macroeconomic indicators of the countries before joining a monetary union, in order to allow these countries to better absorb the idiosyncratic economic shocks after the adoption of a common monetary policy. The compliance with the convergence criteria would also considerably reduce the pressure on the common central bank to grant monetary financing to States. The four proposed primary criteria are the ones mostly used in the AACB sub-regions and the Regional Economic Communities. In addition, convergence criteria are generally chosen to ensure monetary and fiscal stability in a monetary area. The aim is to ensure stability in the acceding countries, in particular of inflation, the level of the budget deficit and the exchange rate through the establishment of an adequate level of external reserves. The convergence of inflation rates would facilitate the implementation of a monetary policy at the regional level and fiscal discipline would enable to avoid "free rider" behaviors. According to Mundell, limiting the inflation rate and the budget deficit below a certain threshold makes it possible to ensure the coherence of the macroeconomic policies of the various member states of a monetary union, thus facilitating the implementation of a common monetary policy.

67. The conduct of a common monetary policy would be much more difficult if inflation rates were considerably divergent. Indeed, a country with a high inflation rate would need a restrictive monetary policy (rising interest rates) in order to counter the rise in inflationary pressures. On the other hand, another country that experienced relatively low inflation or deflation should pursue an expansionary monetary policy (lower interest rates) to revive growth and combat deflation. The common monetary policy in the monetary area could not be used to solve simultaneously the problems in both countries.

68. Harmonization of inflation rates in a monetary area is necessary in order to also prevent countries with high inflation become less competitive than the others. Indeed, a country of the monetary union experiencing a higher level of inflation would have unfavorable real effective exchange rates and real interest rates, with adverse consequences for competitiveness and economic growth.

69. Moreover, the issue of the existence and nature of the link between inflation and growth has been the subject of considerable interest and debate. It is generally accepted that high inflation outcomes have a negative effect on medium and long-term growth<sup>3</sup>. The link between low inflation and high growth has also been found by various regional studies<sup>4</sup>. It is admitted that inflation impedes efficient resource allocation by affecting the signaling role of relative price changes and the decision making process.

70. However, Khan and Senhadji indicate that if inflation is inimical to growth, policymakers should aim at low rates of inflation. But, how low should inflation be? Should the target inflation be 10 percent, 5 percent, or zero percent? More generally, at what level of inflation does the relationship between inflation and growth become negative?

<sup>3</sup> / Studies cited by Khan M. S. and Senhadji A.S, 2000, IMF working Paper (WP/00/110): Barro (1991), Fischer (1983, 1993), Bruno and Easterly (1998), Sbordone and Kuttner (1994).

<sup>4</sup> / De Gregorio (1992) for Latin America, Hadjimichael, Ghura, and Others (1995) for Sub-Saharan Africa, and Fischer, Sahay and Vegh (1996) for transition economies.

- 71.** In this regard, several empirical studies found a nonlinear relationship between inflation and long-run growth<sup>5</sup>. Khan and Senhadji (2000) found that the threshold beyond which inflation exerts a negative effect on growth is lower for industrial countries (1-3 percent) than for developing countries (7-11 percent). Barro (1995) demonstrates that clear evidence of adverse effects of inflation comes above 15 percent.
- 72.** Historical inflation on the African continent averages 11% and threshold studies indicate a level of inflation of about 12%. However, high budget deficits and debt/GDP ratios call for targeting lower rates of inflation. An inflation rate of less than 7% as a start is desirable. Inflation should be determined by using the change in the consumer price index on an annual average basis.
- 73.** In a monetary union, budget deficits entail externalities affecting other countries. When a country is experiencing an excessive budget deficit in a monetary union, the welfare of consumers in other countries is also affected, as domestic demand and prices may increase across the union, leading to a possible deterioration of the trade balance and a depreciation of the union's exchange rate. Budget deficits also tend to increase interest rates. Thus, a monetary union contributes in strengthening the transmission of the impact of fiscal policies among countries. As indicated by Bukowski (2006)<sup>6</sup>, growth of budget deficits may lead to the crowding out effect of private expenditures on consumption and investment, which limits the long-run possibilities of economic growth. A high tax burden has adverse effects on an economy's international competitiveness. Moreover, a country registering excessive budget deficits would need fiscal bail outs which could be costly for the tax payers of the other monetary union member States. In this respect, it is appropriate to coordinate fiscal policies in a monetary union, which shows the interest of monitoring budget deficits.
- 74.** Using the European Monetary Union framework:  $d = g * b$ , where  $d$  stands for budget deficit to GDP ratio,  $g$  for projected nominal GDP growth rate and  $b$  for government debt to GDP ratio, it comes out that the budget deficit should be less than 5% of GDP, as the average projected nominal growth rate in Africa is around 8% and the debt to GDP rate is around 65%.
- 75.** With regard to the financing of the budget deficit by the central bank, economic theory recommends that the central bank eliminates or substantially reduces the monetary financing of the budget deficit, in order to contain the inflationary pressures that it might generate. In this regard, Governments are encouraged to raise the resources they need in the money market, in particular on the negotiable debt securities segment, which most central banks have helped to establish in recent decades. This new type of financing, which is a public offering, is assimilated to a recycling of bank liquidity and enables to avoid inflationary pressures and thus contributes to the strengthening of price stability. Therefore, the target would be to move toward eliminating central bank credit to government. However, given the current state of Government finances in many countries, a level of financing of no more than 5% of the previous year's government's tax revenue is suggested.
- 76.** Gross external reserves, an indicator also used as a convergence criterion, constitute a credible instrument to assure the smooth functioning of the foreign exchange market of member countries in the monetary union. There is also need to have sufficient external reserves to

<sup>5</sup> / Fisher (1993), Sarel (1996), Bruno and Easterly (1998), Khan and Senhadji (2000).

<sup>6</sup> / Bukowski S. (2006), Quaderni del Dipartimento di Economia, Finanza e Statistica, Università di Perugia, Dipartimento Economia.

create confidence in the economy and cope with exogenous shocks or massive capital outflows in connection with the high vulnerability of African countries to commodity price fluctuations. Given the current state of external reserves in many countries, an objective of 3 months of imports cover is suggested with a target of 6 months over the longer term. The number of months of imports should be based on a moving average of the last 6 months.

### 77. 2.5.2. Harmonization of the secondary criteria

The table below provides a summary of the proposals for the secondary criteria to be selected, as well as their thresholds, definitions and measurements in the AACB sub-regions and the Regional Economic Communities. The secondary criteria are generally linked to the primary ones and are also justified by the strengthening of monetary stability and fiscal discipline.

**Table 7: Selected Secondary Criteria**

Criteria	Threshold	Definition	Measurement	Justifications
General Government Debt / GDP	< 65%	Total stock of outstanding General Government debt as a ratio of nominal GDP  End period data	Ratio of General Government debt to GDP	<ul style="list-style-type: none"> <li>- Available data indicates that the current average is 56%</li> <li>- Infrastructure needs of member States</li> <li>- 65% will give us a budget deficit to GDP ratio of 5%, with a projected nominal GDP growth rate of 8%.</li> </ul>
Total Tax Revenue/GDP	≥ 20%	Total tax revenue as a ratio of nominal GDP	Total tax revenue divided by nominal GDP	<ul style="list-style-type: none"> <li>- Grants average 3%</li> <li>- Total tax revenue to GDP ratio currently at 18%</li> </ul>
Nominal Exchange Rate	Variability ±10%  (Target ±5%)	The average official exchange rate of the country during the year	Depreciation/Appreciation in the nominal exchange rate not exceeding 10%	<ul style="list-style-type: none"> <li>-Concerns raised by Bureau members on the need for flexibility</li> <li>- Provide room for macroeconomic adjustment</li> </ul>
Government Capital Investment/Tax Revenue	≥ 30%	Capital expenditure by Central Govt. as a ratio of tax revenue (Govt.	Ratio of capital expenditure to tax revenue	<ul style="list-style-type: none"> <li>- To encourage tax revenue collection</li> <li>- To encourage investment in capital</li> </ul>

		to invest in projects that generate more tax revenue)		expenditure  - The high growth rate has to be supported by high investment spending by Governments to encourage tax revenue
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78. Four criteria are proposed as the secondary criteria. The criterion Public debt / GDP is used for its relevance in the assessment of the level of indebtedness of a given country. Moreover, public debt is one of the relevant criteria for judging the financial solvency of a state and is a result of all financial policy decisions. The maximum level of 65%<sup>7</sup> is set on the basis of current available data, the infrastructure needs of member States as well as the coherence with a budget deficit to GDP ratio of 5% and a nominal growth rate of 8%. Total tax revenues / GDP is maintained to assess the fiscal pressure and the efforts made by governments to collect taxes. This ratio should be greater or equal to 20%. In a monetary union, it is necessary to pool the main monetary policy instruments, in particular the exchange rate variable, so that they are stabilized in the pre-monetary union phase. Moreover, information on nominal exchange rate is considered to be easier to collect than computing real exchange rate or real effective exchange rate. A stable nominal exchange rate should fluctuate by  $\pm 10\%$  at the most on an annual basis. A threshold of  $\pm 10$  is suggested to account for the concerns raised by Bureau members on the need for flexibility and to provide room for macroeconomic adjustment. Government capital investment / tax revenue is maintained at a threshold of  $> 30\%$  to encourage tax revenue collection and investment in capital expenditure. Moreover, a high growth rate has to be supported by high investment spending.

79. Overall, the Experts Group suggests the use of 4 primary criteria and 4 secondary criteria to assess macroeconomic convergence in the AACB sub-regions and Regional Economic Communities. A definition, a measurement and a threshold are proposed for each criterion. The adoption of these criteria should allow their harmonization at the sub-regional and continental levels.

## 2. 6. Definition of new stages for the implementation of the AMCP

80. Following the refinement of the convergence criteria and considering that the AMCP objective of establishing the African Central Bank and common currency by 2021 might be difficult to meet, new stages for the implementation of the AMCP are proposed.

### 81. Stage 3 (Jan 2017-Dec 2027)

- Harmonization of Monetary policies:
  - Development of a Harmonized Monetary Policy Framework at sub-regional levels (Jan 2018- Dec 2019);

<sup>7</sup> / A study by the World Bank found that if the debt-to-GDP ratio exceeds 77% for an extended period, it slows economic growth. Every percentage point of debt above this level cost the country 1.7% in economic growth. It is even worse for emerging markets as each additional percentage point of debt above 64% will slow growth by 2% each year. (Mehmet Caner, Thomas Grennes and Fritz Koehler-Geib, 2010)

- Establishment of the African Monetary Institute (AMI) (by December 2020);
  - Establishment of African Monetary Institute Bureau: North (2021), South (2021), East (2021), West (2021) and Central African Bureau (2021);
- Adoption of the Harmonized Monetary Policy Framework at sub-regional levels (Jan 2020-Dec 2024) -This is the period for sensitization Campaigns;
- Implementation and coordination of the harmonized Monetary Policy Framework (Jan 2025).
- Gradual interconnection of payments and clearing systems at sub-regional and regional levels; (Jan 2018-Dec 2026):
  - Development of the payment and clearing systems in countries where payment systems are not yet fully developed (Jan 2018-Dec 2024);
  - Interconnectivity of payment and clearing systems (Jan 2025-Dec 2027).
- Promotion of African Banking networks; ( 2018- 2033 ongoing);
- Study on determination of inflation threshold in all the sub-regions (Jan 2018-Dec 2021);
- Development of Framework for Harmonized CPI at the sub-regional level (Jan 2018-Dec 2023);
- Adoption of the Harmonized CPI Framework at sub-regional level (Jan 2024-Dec 2025);
- Study on determination of inflation threshold in Africa (Jan 2025-Dec 2027);
- Implementation of harmonized CPI across Africa at sub-regional levels (Jan 2026- Dec 2027);
- Development of a Framework for Harmonized CPI at continental level (Jan 2024-Dec 2027);
- Harmonization of continental statistical frameworks (Jan 2024-Dec 2027)
- Promotion of sub-regional and regional stock exchanges:
  - Sub-regional and African capital market integration (Jan 2018-Dec 2027):
    - Development of common capital market laws and practices;
    - Development of stock cross-listing frameworks.
  - Formation of Association of African Stock Exchanges to anchor this initiative on African capital market integration (Jan 2018-Dec 2019).
- Current and Capital Account liberalization (Jan 2024-Dec 2027);
- Strengthening and harmonization of banking and other financial laws at sub-regional level (Jan 2018-Dec 2027):
  - Development of common banking laws;
  - Development of common supervisory frameworks for:
    - Insurance

- Pension
- Mortgages
- Other financial institutions Creation of institutional, administrative and legal framework for setting up sub-regional currencies and Central Banks;
- Harmonization of Fiscal and Trade Policy Frameworks at the sub-regional level;
- Study on the establishment of sub-regional exchange rate mechanisms (Jan 2025-Dec 2027);

AMI to develop Framework on African Monetary Policy (2023- 2027).

#### 82. Convergence Criteria:

- Budget deficit/GDP  $\leq 5\%$
- Inflation rate of  $\leq 7\%$
- Central Bank financing of budget deficit  $\leq 5\%$  of previous year's tax revenues;

External reserves/imports cover of  $\geq 3$  Months.

#### 83. Stage 4 (Jan 2028-Dec 2032)

- Coordination of Macroeconomic and trade policies at sub-regional level;
- Assessment of macroeconomic performance and negotiation for the establishment of sub-regional Central Banks;
- Adoption of the institutional, administrative and legal framework for setting up sub-regional currencies and Central Banks. Finalization of arrangements required for the launching of the Sub-regional Monetary Unions;
- Review of study on the establishment of Sub-regional Exchange Rate Mechanisms;
- Operationalization of sub-regional Exchange Rate Mechanism (Jan 2030);
- Establishment of Sub-regional Central Banks (**Jan 2032**);
- Harmonization of banking and other financial laws at Continental level (Jan 2028-Dec 2037):
  - Development of common banking laws;
  - Development of common supervisory frameworks for:
    - Insurance;
    - Pension;
    - Mortgages;
    - Other financial institutions.

#### 84. Convergence Criteria:

- Budget deficit/GDP  $\leq 4\%$ ;

- Inflation rate of **≤6%**
- Central Bank financing of budget deficit **≤4%** of previous year's tax revenues;
- External reserves/imports cover of **≥ 4 Months**.

**85. Stage 5 (Jan 2033-Dec 2037)**

- Appointment of key officers of the sub-regional Central Banks;
- Recruitment of staff of the sub-regional Central Banks;
- Preparation for the introduction of sub-regional currencies;
- Introduction of sub-regional currencies (Jan 2036);
- Circulation of sub-regional currency notes (Jan 2037);
- Continued observance of the convergence criteria.

**86. Convergence Criteria**

- Budget deficit/GDP **≤ 3%**;
- Inflation rate of **≤ 5%**;
- Central Bank financing of budget deficit **≤ 3%** of previous year's tax revenues;
- External reserves/imports cover of **≥ 5 Months**.

**87. Stage 6 (Jan 2038-Dec 2042)**

**Transitional period during which the sub-regional central banks/monetary institutions would converge into the African Central Bank**

- Harmonization of Monetary policies at continental level:
  - Harmonization of Monetary Policy Frameworks at continental levels (Jan 2038-Dec 2039);
  - Adoption of the Harmonized Monetary Policy Framework at continental level (Jan 2040-Dec 2041) -This is the period for sensitization Campaigns;
  - Implementation and coordination of the harmonized Monetary Policy Framework (Jan 2042).
- Interconnection of payments and clearing systems at continental level (Dec 2040);
- Review of the Framework for Harmonized CPI at Continental level (Jan 2038-Dec 2039);
- Adoption of the Harmonized CPI Framework at Continental level (Jan 2040-Dec 2041);
- Implementation of Harmonized CPI across Africa at Continental level (Jan 2042);

- Fully Integrated African capital market (Jan 2040):
  - Development of common capital market laws and practices ( 2038);
  - Deployment of African Capital Market laws ( 2039);
  - Development of stock cross-listing frameworks ( 2039);
  - Commencement of African Capital Market Cross listing (2040).
- Creation of institutional, administrative and legal framework for setting up of the African Central Bank and Currency (Jan 2038-Dec 2040);
- Harmonization of Fiscal and Trade Policy Frameworks at the Continental Level (2040);
- Study on the establishment of continental Exchange Rate Mechanism (Jan 2039-Dec 2040);
- Coordination of Macroeconomic and trade policies at Continental level;
- Assessment of macroeconomic performance and negotiation for the establishment of the ACB;
- Adoption of the institutional, administrative and legal framework for introducing the African common Currency.

**88. Convergence Criteria:**

- Budget deficit/GDP  $\leq$  **3%**;
- Inflation rate of  $\leq$  **3%**;
- Central Bank financing of budget deficit =**0%** of previous year's tax revenues;
- External reserves/imports cover of  $\geq$  **6 Months**.

**89. Stage 7 (Jan 2043 – Dec 2045)**

- Review of study on the establishment of continental Exchange Rate Mechanism (2043);
- Operationalization of Exchange Rate Mechanisms (2044);
- Mid-term assessment of sub-regional performance;
- Final assessment of sub-regional performance against convergence criteria;
- Establishment of the African Central Bank (**Jan 2045**).

**90. Convergence Criteria:**

- Budget deficit/GDP  $\leq$  **3%**;
- Inflation rate of  $\leq$  **3%**;
- Central Bank financing of budget deficit =**0%** of previous year's tax revenues;  
External reserves/imports cover of  $\geq$  **6 Months**.

## **Prayers**

**The Experts Group presents to the Assembly of Governors for their kind consideration and seeks:**

### **Recommendation to the AUC approval for the:**

1. **Harmonized Convergence Criteria.**
2. **Timelines** for the establishment of the Regional Central Banks and the African Central Bank.
3. The establishment of the **African Monetary Institute (AMI)** latest by 2020.

**Table 8: Primary Convergence Criteria and Stages of the AMCP**

Criteria	Stage 3 (Jan. 2017-Dec 2027)	Stage 4 (Jan. 2028-Dec 2032)	Stage 5 (Jan. 2033-Dec 2037)	Stage 6 (Jan. 2038-Dec 2042)	Stage 7 (Jan. 2043-Dec 2045)
Overall Budget Deficit / GDP	≤5%	≤4%	≤3%	≤ 3%	≤ 3%
Inflation Rate	≤7%	≤6%	≤5%	≤3%	≤3%
Central Bank Credit to Gov.	≤5%	≤4%	≤3%	≤0%	≤0%
External Reserves / Imports	≥ <u>3m</u>	≥ <u>4m</u>	≥ <u>5m</u>	≥ <u>6m</u>	≥ <u>6m</u>

**Table 9: Secondary Criteria**

Criteria	Threshold
Public Debt/ GDP	≤ 65%
Total Tax Receipts/GDP	≥ 20%
Nominal Exchange Rate	Variability of ±10%
Government Capital Investment/Tax Revenue	≥ 30%

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## Appendix

**Table: Convergence criteria of the AMCP**

<b>Primary criteria</b>	<b>Secondary criteria</b>
<ul style="list-style-type: none"> <li>• Annual inflation rate below 3%;</li> <li>• Ratio of budget deficit (excluding grants) to GDP less than 3%;</li> <li>• Minimization of the budget deficit financing by the Central Bank;</li> <li>• External reserves (in months of imports of goods and services) greater than or equal to 6.</li> </ul>	<ul style="list-style-type: none"> <li>• No accumulation of new domestic payment arrears and liquidation of all old arrears in relation to the public sector;</li> <li>• Tax revenues relative to GDP greater than or equal to 20%;</li> <li>• Ratio of Salary mass to tax revenue less than 35%;</li> <li>• The sourcing of minimum of 20% Government capital investment from fiscal receipt;</li> <li>• Maintenance of positive real interest rates;</li> <li>• Maintaining the stability of the real exchange rate.</li> </ul>

